(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 17 February 2005 (17.02.2005)

PCT

(10) International Publication Number WO 2005/014811 A3

- (51) International Patent Classification7: C12N 15/11, C12P 19/34, C07H 21/02, 21/04, A01N 43/04, A61K
- 31/713
- (21) International Application Number:

PCT/US2004/025589

- (22) International Filing Date: 6 August 2004 (06.08.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/493,561	8 August 2003 (08.08.2003)	US
10/693,059	23 October 2003 (23.10.2003)	US
10/720,448	24 November 2003 (24.11.2003)	US
10/727,780	3 December 2003 (03.12.2003)	US
10/757,803	14 January 2004 (14.01.2004)	US
60/543,480	10 February 2004 (10.02.2004)	US
10/780,447	13 February 2004 (13.02.2004)	US
10/826,966	16 April 2004 (16.04.2004)	US
PCT/US04/1345		US
PCT/US04/1639	0 24 May 2004 (24.05.2004)	US

- (71) Applicant (for all designated States except US): SIRNA THERAPEUTICS, INC. [US/US]; 2950 Wilderness Place, Boulder, CO 80301 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MCSWIGGEN, James [US/US]; 4866 Franklin Drive, Boulder, CO 80301 (US). CHOWRIRA, Bharat, M. [US/US]; 576 Manorwood Lane, Louisville, CO 80027 (US).

- (74) Agent: TERPSTRA, Anita, J.; McDonnell Boehnen Hulbert & Berghoff LLP, 300 South Wacker Drive, Suite 3200. Chicago, IL 60606 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR. GB. GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

(88) Date of publication of the international search report: 22 December 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: RNA INTERFERENCE MEDIATED INHIBITION OF XIAP GENE EXPRESSION USING SHORT INTERFERING NUCLEIC ACID (siNA)

(57) Abstract: This invention relates to compounds, compositions, and methods useful for modulating XIAP gene expression using short interfering nucleic acid (siNA) molecules. This invention also relates to compounds, compositions, and methods useful for modulating the expression and activity of other genes involved in pathways of XIAP gene expression and/or activity by RNA interference (RNAi) using small nucleic acid molecules. In particular, the instant invention features small nucleic acid molecules, such as short interfering nucleic acid (siNA), short interfering RNA (siRNA), double-stranded RNA (dsRNA), micro-RNA (miRNA), and short hairpin RNA (shRNA) molecules and methods used to modulate the expression of XIAP genes.

